



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,408	03/30/2006	Paul Raymond Smith	7397336401	7547
24197 7590 02/09/2009 KLARQUIST SPARKMAN, LLP 121 SW SALMON STREET SUITE 1600 PORTLAND, OR 97204				
EXAMINER HANNON, THOMAS R				
ART UNIT		PAPER NUMBER		
3656				
MAIL DATE		DELIVERY MODE		
02/09/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/574,408

Applicant(s)

SMITH, PAUL RAYMOND

Examiner

Thomas R. Hannon

Art Unit

3656

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6-11, 13, 16, 18 and 19 is/are rejected.
- 7) ☒ Claim(s) 3-5, 14, 15, 17, 20 and 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsman's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 6-11, 13, 16, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newley et al. US 5,660,482 in view of Harrison GB 2,170,279.

Newley discloses a self-lubricating bearing as claimed including a counterface surface in close sliding contact with a bearing liner, the counter face surface having a surface finish and a hardness of less than 1000VPN. Newley does not disclose the specific range of surface finish of "less than 20nm", but does disclose the desirability of a smooth surface (column 2, line 9). Harrison discloses self-lubricating bearings in which the counter surface is desired to be smooth (page 1, line 55), and further discloses surface finishes of less than 20nm (page 2, line 58). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the bearing of Newley such that the counter surface has a surface finish within the range claimed as this is known to improve the bearing characteristics as taught and suggested by Harrison. The bearings of Newley and Harrison are spherical bearings including balls. With respect to claim 8 and 11, it would have been obvious to one of ordinary skill in the art at the time the invention was made to operate the bearing of the prior art in known environments having known parameters, including that as claimed. With respect to claim 9, the method steps presented are fully encompassed by the article combination as set forth in the rejection with respect to claim 1.

Claims 3-5, 14, 15, 17, 20, and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant's arguments filed January 20, 2008 have been fully considered but they are not persuasive.

In response to the rejection, Applicant has not amended the claims, but disagrees with the rejection "for at least two reasons. First, the Office action mischaracterizes the bearing disclosed in Newley. Second, one of ordinary skill in the art would not combine the teachings of Newley and Harrison because they teach away from such combination."

First, with respect to Newley, Applicant states: "Newley discloses that the inner surface 2 of the outer bearing race 1 may be chromium plated, but chromium plating is not a self-lubricating liner." As no specific composition is attached to the "self-lubricating liner" and the chromium plating is provided on the surface "to avoid galling between the cooperating surfaces", the chromium plating corresponds to the claimed "self-lubricating liner" in its broadest reasonable interpretation.

Second, Applicant states because "the hardness requirements of the bearing disclosed in Harrison and Newley are mutually exclusive, one of ordinary skill in the art would not apply the teachings of one reference to modify the bearing disclosed in the other." Applicant's conclusion is incorrect. One of ordinary skill in the art would not preclude applying the teachings of Harrison to Newley solely because the hardness ranges are mutually exclusive. As noted in the rejection, Newley does note the desirability of a smooth surface. The smoothness of a surface is not limited nor defined by its hardness, and as Harrison teaches the desirability of a smooth

surface of less than 20nm, such a teachings is certainly applicable to the bering surface of Newley which desires a smooth surface.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas R. Hannon whose telephone number is (571) 272-7104. The examiner can normally be reached on Monday-Thursday (8:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard WL Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas R. Hannon/
Primary Examiner, Art Unit 3656